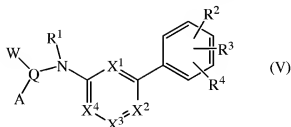


CLAIM AMENDMENTS

1-9. (canceled)

10. (previously presented): A tubulin inhibitor of the formula (V)



or a pharmaceutically acceptable salt, enantiomer, or diastereomer form thereof;

wherein X^1 and X^2 are N and X^3 and X^4 are C independently substituted with Y; R^1 is H, C_{1-6} alkyl, C_{1-6} alkylNR⁵R⁶, C_{1-6} alkylNR⁵COR⁶, C_{1-6} alkylNR⁵SO₂R⁶, C_{1-6} alkylCO₂R⁵, or C_{1-6} alkylCONR⁵R⁶,

wherein R^5 and R^6 are each independently H, C_{1-4} alkyl, aryl, hetaryl, C_{1-4} alkylaryl, or C_{1-4} alkylhetaryl or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR⁷;

wherein R^7 is H or C_{1-4} alkyl;

R^2 is selected from OH, C_{1-6} alkylOH, OC₂₋₆ alkylOH, C_{1-6} alkylNR⁸R⁹, OC₂₋₆ alkylNR⁸R⁹, C_{1-6} alkylNR⁸COR⁹, OC₂₋₆ alkylNR⁸COR⁹, C_{1-6} alkylhetaryl, OC₂₋₆ alkylhetaryl, OCONR⁸R⁹, NR⁸COOR⁹, NR¹⁰CONR⁸R⁹, CONR⁸R⁹, and NR⁸COR¹²;

wherein R^8 and R^9 are each independently H, C_{1-4} alkyl, C_{1-4} alkylNR¹¹R¹³, hetaryl, or cyclohetalkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR¹⁴;

wherein R^{12} is C_{2-4} alkyl, C_{1-4} alkylNR¹¹R¹³, hetaryl, or cyclohetalkyl;

wherein R^{11} and R^{13} are each independently H, or C_{1-4} alkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR¹⁴;

wherein R^{14} is H or C_{1-4} alkyl;wherein R^{10} is H or C_{1-4} alkyl; R^3 and R^4 are each independently H, halogen, C_{1-4} alkyl, OH, OC₁₋₄ alkyl, CF₃, or OCF₃;

Q is C₁₋₄ alkyl;

W is selected from C₁₋₄ alkyl, and C₂₋₆ alkenyl; where C₁₋₄ alkyl or C₂₋₆ alkenyl may be optionally substituted with C₁₋₄ alkyl, OH, OC₁₋₄ alkyl, or NR¹⁵R¹⁶;

wherein R¹⁵, and R¹⁶ are each independently H, C₁₋₄ alkyl, C₁₋₄ alkyl cycloalkyl, C₁₋₄ alkyl cyclohetalkyl, aryl, or hetaryl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR¹⁷;

wherein R¹⁷ is H, or C₁₋₄ alkyl;

A is aryl or hetaryl optionally substituted with 0-3 substituents independently selected from halogen, C₁₋₄ alkyl, CF₃, aryl, hetaryl, OCF₃, OC₁₋₄ alkyl, OC₂₋₅ alkylNR¹⁸R¹⁹, Oaryl, Ohetaryl, CO₂R¹⁸, CONR¹⁸R¹⁹, NR¹⁸R¹⁹, C₁₋₄ alkylNR¹⁸R¹⁹, NR²⁰C₁₋₄ alkylNR¹⁸R¹⁹, NR¹⁸COR¹⁹, NR²⁰COR¹⁸R¹⁹, and NR¹⁸SO₂R¹⁹;

wherein R¹⁸ and R¹⁹ are each independently H, C₁₋₄ alkyl, C₁₋₄ alkyl cyclohetalkyl, aryl, hetaryl, C₁₋₄ alkyl aryl, or C₁₋₄ alkyl hetaryl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR²¹;

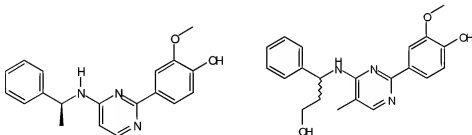
wherein R²¹ is H or C₁₋₄ alkyl;

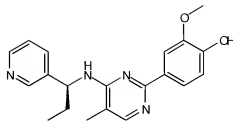
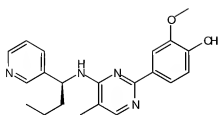
wherein R²⁰ is H or C₁₋₄ alkyl;

Y is selected from H, C₁₋₄ alkyl, OH, and NR²²R²³;

wherein R²² and R²³ are each independently H or C₁₋₄ alkyl.

11. (previously presented): A compound selected from the group consisting of:

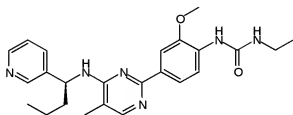




and

or a pharmaceutically acceptable salt or enantiomer form thereof.

12. (previously presented): A compound of the formula:



or a pharmaceutically acceptable salt or enantiomer form thereof.

13. (canceled)

14. (previously presented): A composition comprising a carrier and at least one tubulin inhibitor according to claim 10.

15. (withdrawn): A method to treat a hyperproliferation-related disorder or disease state in a subject, said method comprising administering a therapeutically effective amount of at least one compound according to claim 10.

16. (withdrawn): The method of claim 15, wherein the hyperproliferation-related disorder or disease state is treatable by the modulation of microtubule polymerisation.

17. (withdrawn): The method of claim 15, wherein the hyperproliferation-related disorder or disease state is selected from the group consisting of cancer, infectious diseases, vascular restenosis or inflammatory diseases.

18. (withdrawn): A method to treat a protein-kinase related disorder or disease state in a subject, said method comprising administering a therapeutically effective amount of at least one compound according to claim 10.

19. (withdrawn): The method of claim 18, wherein the protein-kinase related disorder or disease state is selected from the group consisting of atopy, cell mediated hypersensitivity, rheumatic diseases, other autoimmune diseases and viral diseases.

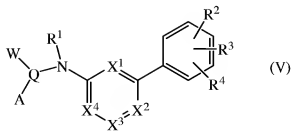
20. (withdrawn): A method to treat diseases and conditions associated with inflammation and infection in a subject, said method comprising administering a therapeutically effective amount of at least one compound according to claim 10.

21. (previously presented): A composition comprising a carrier and at least one compound according to claim 11.

22. (previously presented): A composition comprising a carrier and at least one compound according to claim 12.

23. (previously presented): The tubulin inhibitor of claim 10, wherein R^2 is selected from C_{1-6} alkylOH, OC_{2-6} alkylOH, C_{1-6} alkylNR⁸R⁹, OC_{2-6} alkylNR⁸R⁹, C_{1-6} alkylNR⁸COR⁹, OC_{2-6} alkylNR⁸COR⁹, C_{1-6} alkylhetaryl, OC_{2-6} alkylhetaryl, $OCONR^8R^9$, NR^8COOR^9 , $NR^{10}CONR^8R^9$, $CONR^8R^9$, and NR^8COR^{12} .

24. (currently amended): A compound of the formula (V)



or a pharmaceutically acceptable salt, enantiomer, or diastereomer form thereof;

wherein X^1 and X^2 are N and X^3 and X^4 are C independently substituted with Y; wherein:

R^1 is H, C_{1-6} alkyl, C_{1-6} alkylNR⁵R⁶, where R⁵ and R⁶ are each independently H, C_{1-4} alkyl, aryl, or hetaryl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR⁷;

wherein R⁷ is H or C_{1-4} alkyl;

R² is selected from C_{1-6} alkylOH, OC_{2-6} alkylOH, C_{1-6} alkylNR⁸R⁹, OC_{2-6} alkylNR⁸R⁹, C_{1-6} alkylNR⁸COR⁹, OC_{2-6} alkylNR⁸COR⁹, C_{1-6} alkylhetaryl, OC_{2-6} alkylhetaryl, $OCONR^8R^9$, NR^8COOR^9 , $NR^{10}CONR^8R^9$, $CONR^8R^9$, and NR^8COR^{12} ;

wherein R⁸ and R⁹ are each independently H, C_{1-4} alkyl, C_{1-4} alkylNR¹¹R¹³, hetaryl, or cyclohetalkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR¹⁴;

wherein R¹² is C_{2-4} alkyl, C_{1-4} alkylNR¹¹R¹³, hetaryl, or cyclohetalkyl;

wherein R¹¹ and R¹³ are each independently H, or C_{1-4} alkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR¹⁴;

wherein R¹⁴ is H or C_{1-4} alkyl;

wherein R¹⁰ is H or C_{1-4} alkyl;

R³ and R⁴ are each independently H, halogen, C_{1-4} alkyl, OH, OC_{1-4} alkyl, CF₃, or OCF₃;

Q is CH;

W is ~~C_{1-4} alkyl~~ C_{2-4} alkyl, or C_{2-6} alkenyl; where ~~C_{1-4} alkyl~~ C_{2-4} alkyl or C_{2-6} alkenyl may be optionally substituted with C_{1-4} alkyl, OH, OC_{1-4} alkyl or NR¹⁵R¹⁶;

R¹⁵, and R¹⁶ are each independently H or C_{1-4} alkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR¹⁷;

A is aryl, or hetaryl optionally substituted with 0-2 substituents independently selected from halogen, C_{1-4} alkyl, CF₃, aryl, hetaryl, OCF₃, OC_{1-4} alkyl, OC_{2-5} alkylNR¹⁸R¹⁹, Oaryl, Ohetaryl, CO₂R¹⁸, CONR¹⁸R¹⁹, NR¹⁸R¹⁹, C_{1-4} alkylNR¹⁸R¹⁹, NR²⁰ C_{1-4} alkylNR¹⁸R¹⁹, NR¹⁸COR¹⁹, NR²⁰CONR¹⁸R¹⁹, and NR¹⁸SO₂R¹⁹;

wherein R¹⁸ and R¹⁹ are each independently H, C_{1-4} alkyl, C_{1-4} alkyl cyclohetalkyl, aryl, hetaryl, C_{1-4} alkyl aryl, or C_{1-4} alkyl hetaryl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR²¹;

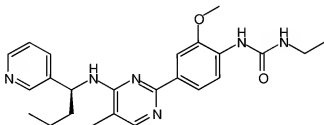
wherein R^{21} is H or C_{1-4} alkyl;

wherein R^{20} is H or C_{1-4} alkyl;

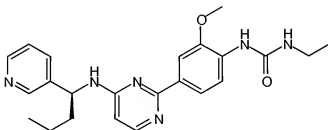
Y is selected from H, C_{1-4} alkyl and $NR^{22}R^{23}$;

wherein $R^{22}R^{23}$ are each independently H or C_{1-4} alkyl.

25. (previously presented): The compound of claim 24 selected from:



and



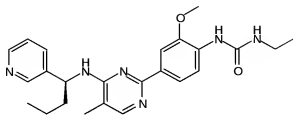
or a pharmaceutically acceptable salt or enantiomer form thereof.

26. (previously presented): A composition comprising a carrier and at least one tubulin inhibitor according to claim 23.

27. (previously presented): A composition comprising a carrier and at least one compound according to claim 24.

28. (previously presented): A composition comprising a carrier and at least one compound according to claim 25.

29. (previously presented): A compound of the formula:



30. (previously presented): A composition comprising a carrier and at least one compound according to claim 29.